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## SECTOR 6 — CHART INFORMATION

## SECTOR 6

### WEST COAST OF SUMATERA—UJUNG RAYA TO UDJUNG TUAN

**Plan.**—This sector describes the W coast of Sumatera from Ujung Raya to Ujung Tuan, including the off-lying islands.

The arrangement is S from Ujung Raya, and W to E from the off-lying islands.

#### General Remarks

**6.1** On the W coast of Sumatera there is a high, rocky coast, or if there is a strip of sand by the sea, the land rises rapidly behind it to the neighboring hills. Numerous small streams discharge their waters on the W coast, but most of them are barred and only navigable by small craft. Nearly the whole coast is inaccessible due to heavy surf.

The routes along the W coast of Sumatera may be considered as three in number, but the outer route may be said to be free from danger. The coast is reported to be only partially surveyed. Vessels should keep to the sea until abreast the desired port before hauling in.

The route to the W of all the islands, in the open sea, is the best of the three, especially for vessels not intending to touch at any of the W coast ports.

The middle route is the space between the chain of large islands in the offing and those small islands adjacent to and interspersed along the coast. It ranges from 10 to 30 miles distance from the coast of Sumatera.

The inner route is that close along the coast and between some of the islands and dangers off it. Like the middle route, it should seldom be chosen; but as there are in many places moderate depths for anchoring, it is preferable in that respect to the middle route.

Vessels visiting many of the ports are obliged to use it, but considerable risk is run when taking this route at night; those using it are generally obliged to anchor at sunset.

**Winds—Weather.**—The influence of the SW and NE monsoons are felt on the W coast of Sumatera as far S as 2°N, S of the Indian Ocean monsoons. But from **Ujung Raya** (5°32'N., 95°11'E.) to 4°N the winds are quite different from those between 4°N and 2°N.

Between Ujung Raya and 4°N, the SW monsoon prevails from May to October, and the NE monsoon, from December to March. During the height of the SW monsoon, the sea breeze prevails at times during the night. Generally speaking the land winds are clearly perceptible by the deflection of the wind to SE or N during the night. Squalls are frequent during the monsoon, and there is often a considerable sea along this coast. It is somewhat hazy at times.

The NE monsoon period is from December to March, and it is less strongly marked. When the monsoon has fairly set in, there is usually a gentle S breeze in the morning, followed by a calm, and in the afternoon a light breeze. After sunset comes, the land wind prevails all night. Between 4°N and 2°N is the region of calms and light variable winds.

The influence of the monsoons only appears in a W tendency of the day wind from March to November, and an E tendency

from November to March; at night, except in January and February, there is always a N tendency in the wind.

In April, SW and NW winds are most prevalent, both night and day. From May the NW winds become more prominent.

During the following months they increase and reach their maximum in October; at times these winds cause a considerable sea. August is marked by a frequency of NE winds. At night, the winds from May to November are from NW to NE. From November to January, the wind is variable in the daytime; at night it is generally from NE to E.

**Tides—Currents.**—The tides on the W coast of Sumatera are chiefly semi-diurnal in character and of small range, rarely exceeding 1.2m.

The current off the W coast of Sumatera sets mainly NW at a maximum rate of 2 knots near the 200m curve. It seldom sets SE, but may sometimes set onshore. Beyond 8 miles from the coast, the surface current caused by the wind attains a maximum rate of 1.25 knot with NW winds and 1 knot with SE winds.

North of the equator, the current outside the islands may sometimes be the reverse to that flowing between the islands and the coast.

**Pilotage.**—Pilotage is compulsory for all the ports of the Republic of Indonesia at which pilots are available.

Experience has shown that little confidence should be placed in the natives who offer themselves as pilots on the W coast of Sumatera for ports seldom visited. Signals for a pilot are in accordance with the International Code of Signals.

**Caution.**—The coastline is deeply indented, forming numerous bays, none of which, however, N of **Sibolga** (1°44'N., 98°46'E.), afford complete shelter during the SW monsoon. There are many visible and sunken dangers off the coast, but N of **Ujung Raja** (3°44'N., 96°31'E.), they do not extend to any great distance. South of that point they extend from 20 to 30 miles.

Many dangers no doubt exist that are not charted, caution is necessary at all times. Many of them are steep-to coral reefs, so that soundings will give no warning; a good lookout aloft should be kept during daylight, and vessels should proceed only at a moderate speed when navigating in the vicinity of dangers. Soundings, however, should not be neglected.

#### Ujung Raya to Teluk Rigaih

**6.2 Ujung Raya** (Ujung Raja) (5°32'N., 95°11'E.) is a lofty promontory rising precipitously from the sea and easily recognized from all directions; there are depths of 21.9m at a short distance from it.

A number of sunken dangers lie near the coast rendering it advisable to give it a berth of 5 or 6 miles, especially at night.

Most of the dangers are steep-to, as is the coast in most places, but they are generally seen by the surf breaking over them. There are numerous prominent headlands and mountains by means of which the position of a vessel is easily verified.

An indifferent bottom almost everywhere, and the heavy ocean swell and poor shelter from W winds, render most places on this portion of the W coast as undesirable anchorages.

The coast between Ujung Raya to Teluk Rigaih, about 57 miles SSE, is very irregular and has many prominent headlands, with bays between, none of which afford secure anchorage during the SW monsoon.

**Teluk Kruengraba** (Kroeng Raba Bay) (5°28'N., 95°04'E.), lying 2.5 miles S of Ujung Raya, is about 4 miles wide; the mountains on either side make it appear as a valley when being a considerable distance off, and it has been mistaken for **Aroih Cut** (Suratte Passage) (5°32'N., 95°09'E.).

There is a cement-handling pier in the bay. The pier is 125m long with a depth of 10m alongside; vessels with a maximum length of 150m and a maximum draft of 9.1m can be accommodated. Pilotage is compulsory. The pilot boards 1.75 miles WNW of the breakwater light. Vessels can obtain anchorage in 22m, about 2 miles NW of the light.

**Ujung Ritieng** (5°26'N., 95°14'E.) is the S entrance point of Teluk Kruengraba. The point is a precipitous headland with a rock above-water close off it and depths of 18.3m just beyond.

**Aert van Nes** (Karang Rada) (5°27'N., 95°09'E.), a coral patch with a least depth of 11.9m, lies about 5 miles WNW of Ujung Ritieng. Coehoorn Reef, 5.5 miles S of Aert van Nes, has a least depth of 11.9m.

Detached banks, with depths of from 12.8 to 16.5m, lie E and SE of Coehoorn Reef. Sindoro, a coral patch about 2 miles in length, N and S, with depths of 11.9 to 18.3m, is steep-to, with 54.9m close-to on its W side, and 20.1 to 27.4m on the N and E sides.

These reefs are not marked by discoloration, but can be identified at times by a heavy swell over them.

**6.3 Pulau Rusa** (5°17'N., 95°12'E.), 95m high and marked by a light, is a densely wooded island with a rugged coastline. In heavy sea, the water for a considerable distance W of the island becomes a light green color and gives the impression of there being a reef in the vicinity.

**Ujung Poedeng** (Ujung Lambaroh) (5°12'N., 95°16'E.) lies about 6 miles SSE of Rusa, and is a low coastal point with a reef extending about 0.4 mile SE and 0.25 mile W. There is a shoal with depths of 3.2m located about 0.6 mile S of Poedeng. The sea usually breaks over this shoal.

Kluang Bay, entered between **Ujung Sidagung** (5°08'N., 95°18'E.), located 4 miles SSE of Ujung Lambaroh, and **Oedjoeng Tangkoera** (5°07'N., 95°17'E.), about 2 miles farther SW, is exposed to NW winds and does not afford a good anchorage. During the SW monsoon there is a confused sea in the bay.

Ujung Sidagung is a steep-to and rocky point close N of Ujung Seudheuen; the latter point is the termination of a high and very noticeable promontory, joined to the mainland by an isthmus covered with coconut palms.

From Ujung Seudheuen to Raja Bay, about 14 miles SSE, the coast is indented by several small bays available for small craft with local knowledge.

**Raja Bay** (Teluk Raya) (4°54'N., 95°22'E.), entered between Ujung No and the N side of Pulau Raja, about 3 miles S, is one of the best anchorages on this coast; although it is open to the W, it has good holding ground with depths of about 14.6m. The

head of the bay is fringed by a coral reef which extends a short distance, with above-water rocks on it in places.

**6.4 Lho Kroeet** (4°52'N., 95°24'E.) (World Port Index No. 50590) is the southernmost of the two villages on the shore of the bay. It is one of the most important pepper ports of the W coast of Sumatera.

**Pulau Raja** (4°52'N., 95°22'E.) is densely wooded and about 53m high. A yellowish sandstone rock, about 0.9m high, lies on a reef which extends about 0.2 mile NW from the W extremity of the island.

**Anchorage.**—Anchorage may be obtained anywhere in Raja Bay. With NW winds the best anchorage is about 0.5 mile S of the NE part of Pulau Raja, in a depth of about 14.6m, under the lee of the island.

The coast extending SE of Raja Bay is skirted by reefs and above-water rocks within 1 mile of the coast, which are usually marked by swells.

**Ujung Gla** (4°49'N., 95°24'E.), about 4 miles S of Lho Kroeet, is a sparsely wooded rocky point with precipitous sides and an above-water rock close off its N side. The shore of the bay lying between Lho Kroeet and Ujung Gla consists of low, red-colored hills covered by coconut palms.

**Pulau Keueh** (4°46'N., 95°27'E.), an island 69m high, lies about 4 miles SE of Ujung Gla and 0.5 mile offshore. Its W side is steep-to, and may be approached closely, but the E and S sides have a coral reef 91m wide, with 11m close-to.

**Pejaba Islands** (4°43'N., 9°28'E.), about 4 miles SSE of Pulau Keueh, consists of two wooded islands, with a low, rocky, barren islet, nearly always covered by surf, lying about 0.1 mile SW of the outer island. A rock, nearly awash, lies 0.3 mile S of the inner island.

**6.5 Ujung Gloempang** (4°43'N., 95°30'E.) is a precipitous tongue of land crowned by a green hill with a few scattered trees on it. A reef extends E from the point for about 0.1 mile and to a distance of 137m offshore. Foul ground extends about 0.3 mile S from Ujung Gloempang.

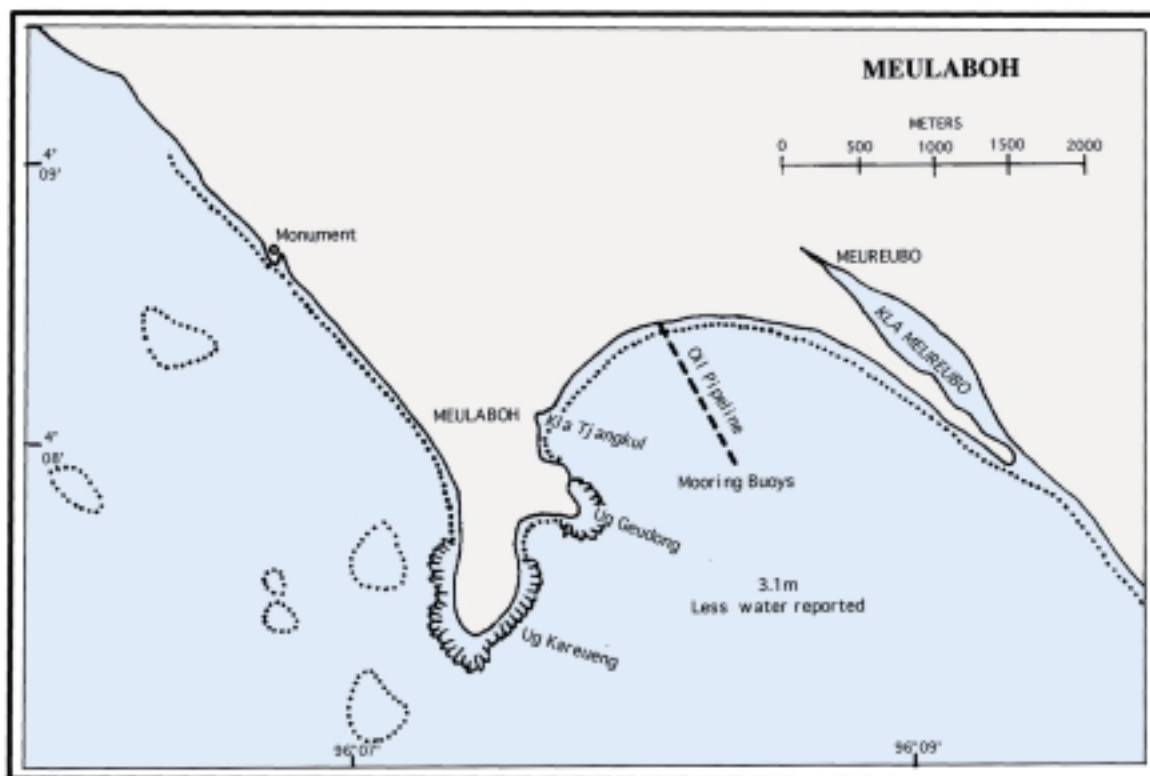
**Tjikem Islands** (4°41'N., 95°31'E.), two in number, are located about 1.2 miles S of Ujung Gloempang. The W island is steep-to on its seaward side. Both islands are densely wooded and joined by a reef.

**Ujung Baro** (4°39'N., 95°32'E.), the SW extremity of the peninsula within which is Teluk Rigaih, is a rocky headland rising steeply from the sea, covered with vegetation, and higher than the land within it. It is the N entrance point for Teluk Rigaih.

Gillis Reef, with a least depth of 3.4m, is about 46m in diameter and occasionally breaks; it lies 1.5 miles NW of Ujung Baro.

**Pulau Rangas** (4°38'N., 95°31'E.), lying about 2 miles SW of Ujung Baro, is a small rocky island 66m high, and covered with trees, which are visible for a considerable distance. Two rocks above-water lie off its SE side, and a sunken rock, which always breaks, lies 91m off its NW side, all of which are steep-to. A rock, 0.9m high, lies ESE, 0.4 mile from Pulau Rangas.

**Anchorage.**—There is fine weather anchorage all around the island, in depths of about 21.9m; small vessels may find shelter during NW winds in the same depth, with the NE extremity of the island bearing 278°, distance about 183m.



## Teluk Rigaih to Ojung Radja

**6.6 Teluk Rigaih** (4°38'N., 95°35'E.) (World Port Index No. 50580) is nearly 2 miles wide and about the same in length; the coast is for the most part composed of rocky cliffs, excepting the swampy portion on its NE side. The four islands which encumber it divide the bay into the N and S harbors.

There is always a heavy swell in Teluk Rigaih. South Harbor, the larger of the two, is used by all but small craft, being about 0.5 mile in extent, with depths of 9.1 to 11m, over sand and mud, and easy of access. It is open to the SW monsoon, rendering it advisable to moor.

North Harbor has depths of 5.5 to 7.3m over a breadth of about 0.1 mile, and is used by small trading craft; it affords fair shelter at all seasons, and being abreast the town, is much more convenient than the South Harbor.

**Pulau Reusam** (4°39'N., 95°33'E.), the largest and highest of the four islands in the bay, is surrounded by a reef. Two shoals, with depths of 3.7 to 5.5m, lie about 0.1 mile W of Pulau Reusam. A patch, with a depth of 5.9m, lies about 0.1 mile E of Pulau Reusam.

**Anchorage.**—Vessels making any stay at Teluk Rigaih are recommended to moor W or S of Pulau Reusam, where there are depths of about 15m, over sand and mud.

There is an anchorage area for vessels in South Harbor with a depth of about 9m.

**Sikawit** (5°00'N., 95°42'E.), a very noticeable twin peak summit 1,872 and 1,655m high, lies about 22 miles NNE of Teluk Rigaih.

Between Teluk Rigaih and Meulaboh, about 47 miles SE, the coast is low with flat land stretching a great distance inland. There are no off-lying dangers on this part of the coast.

The depths are regular, but it is recommended not to get inside the 20m curve at night, as within this depth soundings give little warning of being close inshore. This part of the coast is very uniform and without any remarkable features in the foreground.

The coast between **Ujung Toeba** (Ujung Tuba) (4°12'N., 96°01'E.), a low promontory, and **Ujung Kareueng** (4°07'N., 96°08'E.), about 8 miles SE, is swampy.

Ujung Kareueng, the W extremity of Meulaboh Bay, is a low point sparsely covered with coconut trees with buildings of a settlement; a light is shown from Ujung Kareueng. Ujung Geudong, fringed by a reef, is located about 1 mile NNE of Ujung Kareueng.

Meulaboh Bay affords less protection, there being no reefs seaward. The shore of the bay is fronted by a reef which extends 91m off **Kuala Tjangkul** (4°08'N., 96°08'E.).

**6.7 Meulaboh** (4°08'N., 96°08'E.) (World Port Index No. 50570), situated on the W side of the bay, is the shipping port for copra, pepper, and forest products.

Landing places for boats are available, but is often impossible because of heavy surf.

**Tides—Currents.**—The tides are inconsiderable, but occasionally rise as much as 0.3m.

**Aspect.**—About 2 miles N of Ujung Kareueng and near the coast stands a white conical monument.

The mooring buoys of an oil depot lie about 1 mile ENE of Ujung Geudong. A submerged oil pipeline extends 0.5 mile NNW from the mooring buoys to the shore.

**Anchorage.**—Anchorage may be obtained in a depth of about 7.9m, sand and mud, with the flagstaff close NW of Ujung Geudong bearing 268°, and the light structure on Ujung Kareueng bearing 229°. It is exposed to winds between SW and SE, and the holding ground is bad; vessels should be ready to leave at short notice.

**Directions.**—A vessel approaching from W can round the reefs off Ujung Kareueng by eye, as they are marked by breakers. When Ujung Geudong is open to Ujung Kareueng, she may steer for the anchorage, rounding the latter point at a distance of about 1 mile. Approaching from S, the zinc roofs of Ujung Kareueng are visible from a considerable distance.

**Caution.**—Several dangers, marked by breakers, lie in the W approach to Meulaboh Bay. A reef, with a least depth of 4m, lies about 2 miles NW of Ujung Kareueng and 0.5 mile offshore. About 1 mile SSW of this reef is a 4.9m patch.

About 1 mile W of the same point is a 3.3m patch, with a similar patch close N of it. Between these patches and the W side of the peninsula lies a reef with a depth of 2.4m. Depths of about 3m less than charted were reported to exist in the bay E of a line joining Ujung Kareueng and Ujung Geudong.

Between Meulaboh and **Ujung Raja** (Oedjoeng Radja) (3°44'N., 96°31'E.) about 34 miles SE, the coast is low, with high trees behind. There are no off-lying dangers until about 12 miles SW of Ujung Raja and the soundings give good warning of approach to the coast. The mountains lie far inland and are only visible in the early morning.

## Ujung Raja to Sungai Singkil

**6.8 Gunung Abong Abong** (4°15'N., 96°48'E.), 2,985m high, lies about 35 miles NNE of Ujung Raja; it is a slightly curved dome-shaped summit, only distinguished from the other mountains in the vicinity by its great height.

**Gunung Loser** (3°45'N., 97°11'E.), lying about 40 miles E of Ujung Raja, has two sharp peaks, the NE of which is 3,381m high; from the SW it appears as a saddle.

The summits, which have flat tops, are 3,045 and 1,533m high and lie 4 miles SSE and 12.5 miles S, respectively, of Gunung Loser. Near the coast, there are many smaller mountain peaks further SE.

From a position about 13 miles SW of Ujung Raja to a position about 4 miles W of **Tapa Toean** (3°15'N., 97°11'E.), a distance of about 50 miles SE there are many shoal patches with depths of from 7.6 to 12.8m close inside the 200m curve, and then to the coast there are numerous patches with even lesser depths reported.

Those reefs off the coast between Ujung Raja and **Ujung Brang Bang** (2°16'N., 97°46'E.) are seldom marked by breakers or discoloration.

**Caution.**—There are several islands off this coast, and numerous isolated dangers, many out of sight of land, which make navigation hazardous.

The nature of the bottom changes completely S of **Ujung Radja** (3°44'N., 96°31'E.), whereas to the N, the depths decrease regularly. A vessel may come suddenly into considerable and irregular depths S, which will be close to dangerous shoals.

Soundings, however, should not be neglected, and a good lookout aloft should always be kept during the day. Night navigation is attended with considerable risk.

**Teluk Susoh** (Teluk Soesoh) (3°43'N., 96°48'E.), about 16 miles E of Ujung Raja, is entered between Ujung Pulo Kajee (Ujung Pulaukayee) and Ujung Seurangga, about 1 mile SE; it affords some protection during the SW monsoon, being sheltered from NW winds, which sometimes blow with considerable force, when a heavy swell sets into the anchorage. Both entrance points are fringed by a coral reef.

**6.9 Ujung Seurangga** (3°43'N., 96°48'E.) is a low barren sand spit, near the inner end of which is **Susoh** (Soesoh) (3°43'N., 96°48'E.) (World Port Index No. 50560). Near the E end of Susoh, with its zinc-roofed houses, is a noticeable tree which shows above the edge of the wood, and at the head of the bay there is a prominent tree, painted white.

**Aspect.**—Vessels approaching the roadstead can see some storehouses and a palm oil tank at the settlement for a distance of 9 miles. A pier lies about 183m N of the W entrance point.

The green hills near Teluk Susoh (Teluk Soesoh) are visible for a considerable distance.

Susoh (Susoh) (Soesoh) Light situated at the SW extremity of Ujung Seurangga. Another light is situated 0.2 mile NNE of Susoh Light.

**Anchorage.**—Small vessels may obtain anchorage in Teluk Susoh W of Susoh village, in depths of from 12 to 14m, and in a depth of 18m, mud, with the pierhead bearing about 310°.

Large vessels should anchor in the road, which, although sheltered to some extent by off-lying reefs, lies open to the W swell and to winds between W and S.

**Directions.**—Approach from the W on the parallel of 3°40'N until Susoh Light bears 055° when it should be steered for on that bearing until a white beacon marking the 2.3m patch in the center of the bay, bears about 021°. This course leads clear of all dangers at the greatest possible distance.

The coast between Teluk Susoh and Tapa Toean, about 36 miles SE, is low; the reefs lying in the vicinity of the 20m line are occasionally marked by swell, but never by discoloration. The chart should be referred to for the off-lying reefs between the coast and the 200m curve.

**Caution.**—There are two shoal patches of 2.3 and 8.7m, respectively, near the center of Teluk Susoh. The submerged dangers S and W of Susoh do not show by discoloration owing to the turbid water of the rivers.

They are steep-to, but the sea does not break over them and they are very small, and there may be other dangers not yet discovered in the vicinity.

**6.10 Tapa Toean** (3°15'N., 97°11'E.), entered between Ujung Kupiah and Ujung Batu Itam, about 2 miles E, is

entirely open S. The shores of the roadstead are high and steep, and consist of wooded rocks and high hills.

It is reported to be fringed by a reef in most places, but abreast **Tapa Toean** (3°15'N., 97°11'E.) (World Port Index No. 50550), on the W side of the bay, there is a narrow channel through the reef, with a pier on its S side.

The NW portion of the bay is encumbered by Pakah Reef, which is marked by breakers and rollers.

**Depths—Limitations.**—The pier can accommodate vessels up to 5,000 dwt, with a maximum length of 60m and a maximum draft of about 5m, although ships remain in the roads to load and discharge. Cargo is conveyed to and from shore by private barges.

**Aspect.**—A very prominent house stands among those on the W shore of the bay.

**Anchorage.**—Good anchorage may be obtained, in a depth of 36m, mud, with the pier head bearing 324° and Ujung Kupiah bearing 270°. The anchorage is uncomfortable with winds between W and S.

**Caution.**—Batu Tungkat, a rock which dries, lies about 1 mile W of Ujung Kupiah. Batavia Rock, with a depth of 11.9m, lies about 0.3 mile NW of Batu Tungkat. Batu Kupiah, which dries, lies about 0.1 mile SW of Ujung Kupiah, the W entrance point of the bay.

From a position about 8 miles W of Ujung Kupiah to a position offshore about 13 miles SW of **Ujung Pulo** (2°54'N., 97°31'E.), a distance of about 33 miles, proceed with caution as there are shoals with depths of from 5.5 to 11.9m, lying outside and just inside the 200m curve, and extending from 6.5 to 12 miles offshore. Between these shoals and the coast there are many other dangers with even less depths.

Prominent hills and mountains lie 6.5 miles N, 5.5 miles NNE, and 4 miles NE, respectively, of Ujung Pulo.

Between Ujung Pulo and **Sungai Singkil** (2°16'N., 97°47'E.) is a wide alluvial plain, thickly wooded in parts with casuarina trees. The coast is low with a sandy beach and rises inland. Many reefs and shoals, some of which are unmarked by surf, encumber the coast.

## Off-lying Islands

**6.11 Pulau Simeulue** (2°45'N., 96°00'E.), the N most of the large islands off the W coast of Sumatera, lies about 65 miles from the coast. It is hilly with **Sibau** (2°34'N., 96°16'E.), the highest peak being 625m high. The coasts are mostly rocky, and there are many off-lying islands, islets, and reefs.

The reefs close to and between the several coral islets are steep-to and, except those near **Pulau Sioemat** (2°39'N., 96°23'E.), on the NE side of the island, show up distinctly.

The depths around the island vary greatly, so the soundings give little warning of the approach of land; a good lookout from aloft is advisable. Earthquakes and seismic sea waves occasionally occur, but minor shocks are frequent.

**Kokos Islands** (2°59'N., 95°23'E.) are two low islands, lying about 24 miles W of the N extremity of Pulau Simeulue; they may be seen from a distance of about 13 miles. The southernmost island is marked by a light.

Depths of from 9 to 16.5m exist on the NW end of the bank extending 19 miles out from the W extremity of Pulau Simeulue. These patches are usually marked by heavy rollers.

**Banjak Islands** (2°10'N., 97°17'E.), consisting of a group of islands more than 50 in number, extend from 13 miles NW to 38 miles W of Singkil. The three largest of the islands are Pulau Toeangkoe, Pulau Bangkaroe and Pulau Oedjoeng Batoe, besides which there are many islets with deep-water channels interspersed with rocks between them.

**Pulau Bangkaroe** (Pulau Bangkaru) (2°05'N., 97°07'E.), the southwesternmost of Banjak, is mountainous, attaining a height of 303m. Along the E coast, off the spurs of the mountain ridges, is a strip of low land which is overgrown with mangroves. The N, W, and S coasts are bold and the spurs of the mountains extend to the sea.

Between Pulau Bangkaroe and **Pulau Babi** (2°06'N., 96°39'E.), 23 miles to the W, the channel is deep and considered to be clear of dangers; it is recommended to keep to the Pulau Bangkaroe side. The channel between Pulau Bangkaroe and Pulau Toeangkoe is about 5 miles wide with deep water, and free from danger to within 0.5 mile of either side.

**Pulau Toeangkoe** (Pulau Tuanku) (2°10'N., 97°17'E.), the largest island of the group, is hilly and mountainous. The E side is low and overgrown with mangroves, with several bays in which there is sufficient depth of water; the channels leading to them between outlying reefs are mostly dangerous.

Two conspicuous summits rise on the N coast and form good landmarks.

Pulau Palambak (Palambak Islands) lies off the E coast of Pulau Toeangkoe, with numerous reefs extending to the NW.

The N coast is fronted by numerous reefs and islands located up to 6 miles offshore.

**Pulau Oedjoeng Batoe** (Pulau Udjungbatu) (2°20'N., 97°24'E.), about 10 miles N of Pulau Palambak, is completely surrounded by an extensive reef, and the individual islands mutually connected by coast reefs, which are largely dry at LW. The passages between these islands are practicable for small craft only.

Between Pulau Oedjoeng Batoe and the islands and reefs extending N from Pulau Toeangkoe is a deep channel about 3 miles wide.

East of the reef and foul ground extending about 2 miles NE of Pulau Oedjoeng Batoe is a deep channel about 4 miles wide, said to be one of the best passages between Banjak Islands, but there are several shoal heads in the E part.

**Djawi Djawi** (Jawi-Jawi) (2°23'N., 97°33'E.), the NE of the Banjak Islands, lies about 9 miles E of Pulau Oedjoeng Batoe and about 6 miles W of the Sumatera coast. It is low and sandy, with a few shrubs, and may possibly be seen from a distance of 11 miles. It is surrounded by a large reef, of which the outer edge is always marked by discolored water and overfalls, a few rocks are also visible.

On the N side, between two sand flats which show above water, is a passage through which small craft may reach the shore.

Eastward and W of Djawi Djawi are numerous shoals, and to the W are a few sand flats.

Vessels proceeding N from or S to Singkil can use the channel between Djawi Djawi and the drying patch located about 2.2 miles E of the island. As the reef surrounding Djawi Djawi is always visible, vessels should favor the W side of the channel, taking care to avoid the 6.9m patch about 2 miles NNE of the island.

**Ujung Singkil** (2°16'N., 97°44'E.), 8.5 miles SSE of **Oedjoeng Pasir Gala** (Ujung Pasirgala) (2°24'N., 97°40'E.), may be identified by some dead trees standing in the sea close off it. From it a spit, with depths of from 1.8 to 5.5m, extends about 3 miles SW.

**North Daphne Reef** (Karang Rumambi) (2°13'N., 97°46'E.), with a depth of 1.5m, coral, and steep-to, lies about 4 miles SSE of Ujung Singkil.

### Ujung Singkil to Baroes

**6.12 Sungai Singkil** (Singkil River) (2°16'N., 97°47'E.) may be entered about 3 miles ESE of Ujung Singkil, between Ujung Brang Bang on the W side, and a drying bank on the E side which extends nearly 0.75 mile S from the coast.

Singkil Roadstead is located off the mouth of Sungai Singkil and the town of **Singkil** (2°16'N., 97°48'E.) (World Port Index No. 50540).

**Aspect.**—A disused light-structure is situated about 1.75 miles NE of Ujung Brang Bang.

**Anchorage.**—Anchorage may be obtained in a depth of 7.9m, mud, with the disused light-structure bearing 000°.

It may be also obtained off the mouth of the river in a depth of about 14.6m, mud, with Ujung Brang Bang bearing 020°, and **Ujung Ketapan** (2°16'N., 97°45'E.) located 1.25 miles W of Ujung Brang Bang, bearing 301°.

This berth is very exposed during the SW monsoon. A mooring buoy lies 0.8 mile S of the disused light-structure.

**Directions.**—A vessel bound to Singkil from the N, and having come through the channel E of Djawi Djawi, should keep that island bearing N of 327°, astern, to avoid **Arum Pandjang** (2°18'N., 97°38'E.), which bearing also leads clear of the spit 3 miles SW of Ujung Singkil. Having passed the latter, steer for the anchorage N of North Daphne Reef.

The coastal plain between Sungai Singkil and **Ujung Tuan** (0°15'N., 99°08'E.), about 156 miles SE, is generally narrow, being backed by mountains with numerous peaks.

Between Sungai Singkil and Baroes (Barus), 40 miles SE, the coastal plain is fairly wide, but then to Ujung Tuan, about 116 miles farther SE, the mountains gradually approach the coast. The rivers are generally small and of little importance.

Off the whole of this coast there are numerous reefs and islands, some of which rise steeply from the 200m curve.

Teluk Telaga is located E of Singkil, with **Ujung Radja** (Ujung Raja) (2°14'N., 97°52'E.) forming its W point. Teluk Telaga is open and landing is difficult as the sea is usually breaking on the whole of its N shore. Landing may sometimes be possible on the E side of Ujung Radja, where the shore is clear of dangers.

Between Ujung Radja and **Pulau Musala** (1°38'N., 98°32'E.), about 48 miles SE, there is a deep channel, with a least width of 6.5 miles.

The channel lies between a line of detached reefs, which extends about 8 miles offshore, and a group SW of them, radiating from **Pulau Lakota** (1°51'N., 98°01'E.) about 18 miles SW of Ujung Silabi.

**6.13 South Pylades Reef** (1°41'N., 98°01'E.) is marked by breakers.

From Teluk Telaga the coast takes a SE direction for a distance of 25 miles to **Ujung Silabi** (2°02'N., 98°16'E.) where it turns E, forming Tapues Road on the W end of the bight.

**Lae Tapues** (2°00'N., 98°17'E.) (World Port Index No. 50530) lies about 3 miles E of Ujung Silabi. Anchorage may be taken in 7.3m, mud, close NE of Ujung Silabi.

Baroes Road is located about 2.2 miles ENE of **Tanjung Karang** (2°00'N., 98°21'E.), a peninsula forming the W side of the road, fringed by a drying reef extending about 0.2 mile offshore.

**6.14 Baroes** (2°00'N., 98°23'E.) (World Port Index No. 50520), on the E side of the entrance to Sungai Pasar Terandam, has a landing place inside the mouth of the river. The roadstead is open and unsafe.

**Anchorage.**—Large vessels should anchor in 16.5m about 0.5 mile E of **Pulau Karang** (1°58'N., 98°21'E.) protected from W squalls.

Pulau Nias North Channel, separating Banjak Islands from the N end of Pulau Nias, is a deep passage about 30 miles wide, and except for the reef extending SE from **Pulau Sarang Aloe** (1°59'N., 97°23'E.), is clear of dangers.

### Pulau Nias

**6.15 Pulau Nias** (1°32'N., 97°20'E.), the largest of the islands off the W coast of Sumatera, is hilly and from E appears like a chain of mountains of varying height. It has hardly any conspicuous peaks, but Maziaja Mountain, 432m high in the N portion, is noticeable along with three somewhat lower peaks.

From the W, the hills along the coast are seen to better advantage, and afford good landmarks in conjunction with the islands fronting the coast. From S, the headlands provide the best marks.

**Pulau Sarangbaung** (1°42'N., 97°27'E.) lies 10.5 miles NNE of the N extremity of Pulau Nias. There is a break in the reef on the SE side where boats can land at a village. The island is overgrown with coconuts and is visible for 12 miles.

The N coast of Pulau Nias, which forms the S side of Pulau Nias North Channel, is low, but there is a range of hills extending S from **Tanjung Siginigini** (1°32'N., 97°21'E.), the N extremity of the island, to Maziaja Mountain.

From Tanjung Siginigini to **Tanjung Tojolawa** (1°25'N., 97°03'E.), the NW extremity of Pulau Nias, the coast is in parts fringed by a reef, with several off-lying islands.

From **Pulau Senau** (1°27'N., 97°14'E.), lying about 11 miles ENE of Tanjung Tojolawa, the coast is completely exposed to N and NW squalls. They are prevalent here during the months of October, November, and the first part of December; they may be exceptionally heavy and cause a heavy swell and much sea.

**Anchorage.**—Good anchorage during the NE monsoon can be taken off **Tanjung Helacha** (1°28'N., 97°19'E.), in 16.5m.



During the SW monsoon, anchorages off this coast, as far W as Pulau Senau, are impracticable because of heavy seas.

When anchoring on the N coast of Pulau Nias, swarms of mosquitoes are blown on board at night with the land breeze, and in view of the prevailing malaria it is advisable to anchor as far as possible offshore.

**6.16** The W coast of Pulau Nias is nearly inaccessible because of surf **Tanjung Sositutte** (1°23'N., 97°04'E.), about 2 miles SE of Tanjung Tojolawa, is a low point with a remarkable tree, and it is the S extremity of Tojolawa Peninsula, on the slopes of which are the buildings of a coconut plantation.

Labuan Atjeh, on the E side of the peninsula, affords sheltered anchorage during N winds, in depths of from 18.3 to 21.9m, sand. A 1.2m patch lies on the E side of the bay, about 0.3 mile offshore.

**Pulau Maui** (1°21'N., 97°06'E.), low and barren, lies in the S approach to Labuan Atjeh, about 2.2 miles SE of Tanjung Sositutte. It has a white sandy beach, and is fringed by a reef on which the sea always breaks, extending about 1 mile S; there is a depth of 7.7m at the outer end of the reef.

An extensive reef, with a depth of 8.2m, which is marked by discoloration, lies 3.5 miles S of Pulau Maui.

Anchorage may be obtained in a depth of about 35m, sand and mud, off the E side of Pulau Maui, partially sheltered from the heavy swell.

**Pulau Wunga** (1°13'N., 97°05'E.), about 8 miles S of Pulau Maui, is low and covered with coconut trees. A large conspicuous tree, visible for 16 miles, is located on a small elevation near the N end. The reef extending from the N side of the island is ordinarily marked by high rollers; on the S side is marked by rollers or breakers.

**6.17 Pulau Pulau Hinako** (0°50'N., 97°22'E.) forms a group of eight islands, of which **Pulau Hinako** (0°52'N., 97°20'E.) is the most populated. They are all of coral formation, covered with coconut trees, and flat, with the exception of Pulau Hinako, which has a small ridge on its NW side, on which is a mission church and school. A light is shown from Pulau Hinako.

Between and in the vicinity of the islands are numerous reefs, for which the chart should be consulted. The 20m curve must be considered the limit of safety at Pulau Hinako, as nearly everywhere within this curve are drying reefs or reefs with little depth.

The W side of the four outer islands, with exception of the coast reefs on which there are usually breakers, is clear. By passing the islands at a distance of 1 mile, one will always carry considerable depths.

**Pulau Bawa** (0°50'N., 97°20'E.) is atoll-shaped. The seaward side of all of the islands consists of a raw coral mass which is practically impassable except at Pulau Bawa, of which the W side has been washed smooth.

**Caution.**—Vessels approaching Pulau Pulau Hinako from the N must be careful to avoid the 5.9m patch about 4.7 miles NNE of the light-structure of Pulau Hinako.

**6.18 Tanjung Sirombu** (0°56'N., 97°24'E.), lying about 34 miles SSE of Tanjung Sositutte, is low and wooded and may be

identified by several tall casuarina trees which stand above the other trees. The point is marked by a light.

From a distance it resembles an island, but from closer in the low wooded sandy isthmus joining it to the land is visible.

From both N and S of the point, the broad flat-topped hill Sommumme, 587m high, about 12 miles NE, is visible.

The coast S of Tanjung Sirombu is high. The hilly land extends down the coast at nearly all points.

In many places, especially off the projecting rugged headland, large black above-water rocks lie close inshore.

The coast is indented for about 33 miles SE from Tanjung Sirombu to **Tanjung Lauju** (0°34'N., 97°42'E.), the SW extremity of Pulau Nias. Tanjung Lauju is low, but rises gradually to 110m.

**6.19** A narrow, low plain extends along the S coast of Pulau Nias, but it quickly turns over into rolling land on which various villages have been built. Lagudri provides anchorage between Tanjung Lauju, its W entrance point, and a point about 2 miles E. Its shores are covered with coconut palms, and there is a sandy beach at its head free from rocks, where landing may be effected. Elsewhere, the shores are fringed by a reef extending up to 137m offshore.

The best anchorage position is in 11 to 12.8m, mud and sand, with the entrance points bearing 170° and 218°. It is quite open to S and SW winds and swell, which sometimes extend well up the bay.

A reef, which dries and is marked by breakers, lies about 0.5 mile WSW of Tanjung Lauju; a spit, with depths of less than 11m, extends about 0.6 mile SE from the same point.

**Batu Mandi** (0°33'N., 97°45'E.), a large black rock, lies about 0.3 mile S of the E entrance point and is a good mark.

**Directions.**—A vessel approaching from W should keep Batu Mandi bearing less than 090° until the village on the E side of the bay, about 1 miles NNE of the E entrance point, bears 043° and then steer for the village on that bearing.

When **Batu Ito** (0°33'N., 97°44'E.), lying on the coastal reef about 2 miles from the E entrance point, bears 164°, alter course N for the anchorage.

**Tanjung Hele** (0°33'N., 97°49'E.), the S point of Teluk Dalam, lies about 6 miles E of Teluk Lagudri. A reef marked by discolored water and very high surf extends SE from Tanjung Hele, which should be rounded at a distance of at least 1 mile.

**6.20 Teluk Dalam** (0°33'N., 97°49'E.) (World Port Index No. 50860) is about 1 mile in length. It affords good shelter from all but SE winds, which, however, do not cause much swell, and is free from dangers. It is easily recognized by Tanjung Batu, the N entrance point, which is dark, nearly perpendicular, and 96m high, and has but little reef fronting it.

**Anchorage.**—A good anchorage in 18m may be obtained with the pier head bearing 327° and Tanjung Batu bearing 096°.

**Directions.**—Vessels should steer up the center of the bay on a 297° course, passing about 0.2 mile off Tanjung Batu, to the anchorage.

Leading beacons are situated at the head of the inlet; the front beacon is situated on the head of the pier while the rear beacon is situated at the head of the inlet, about 183m NW of



the front beacon. The beacons, in line bearing 324°, lead into the inlet.

**6.21** The E coast of Pulau Nias has moderate depths with good anchorage and some streams; islets and reefs front the coast here, as on the W side, but the sea being smoother on the E coast renders it safer.

From Teluk Dalam, the coast trends NE for about 6 miles to **Balo Todojghu** (Ujung Tedu Ichu) (0°37'N., 97°54'E.), a low point covered with coconut trees. A number of villages lie scattered along this stretch of coast. A narrow reef fronts the shore, preventing loading in most places.

With S winds, there is quiet anchorage with good holding ground in from 21.9 to 23.8m a little N of Balo Todojghu.

Between Balo Todojghu and **Ujung Sumabawa** (0°48'N., 97°54'E.), about 11 miles N, the coast is high, with mountain ranges approaching the coast. Ujung Sumabawa is marked by a light.

A low plain begins here and extends N, gradually getting wider, at **Tanjung Lambaru** (1°09'N., 97°48'E.) it has a width of 8 miles. The coast consists of a sandy beach, off which rocks are lying. The sea usually breaks, making landings very difficult. About 1 mile W of Ujung Sumabawa, landing may be effected with comparative ease.

Near Ujung Sumabawa, one's attention is attracted by a very conspicuous gap in the mountains, in the background of which the conical **Lologogo** (0°55'N., 97°49'E.), 498m high, together with the white patch 3 miles NE, are prominent features.

**Tanjung Sjuani** (Tanjung Syuani) (0°57'N., 97°56'E.), on which high casuarina trees grow close to the sea, appears as a dark, steep point. Landing is very difficult.

**6.22 Sumabawa** (0°54'N., 98°01'E.), an island situated about 5 miles SE of Tanjung Sjuani, is fringed by a narrow reef. A 6.4m patch lies about 2 miles NNW of Sumabawa.

**Karang Makassar** (Makassar Reefs) (0°53'N., 98°01'E.) are four isolated dangers of from 3 to 8.2m depth, with deep channels between them. They lie from 1.75 to 7 miles S of Sumabawa, and from 6 to 7 miles offshore. They are marked by breakers or a heavy swell.

**Ujung Onolimbu** (1°03'N., 97°54'E.) lies about 6 miles NW of Tanjung Sjuani. Onolimbu Road has good anchorage in depths of 21.9m to 25.6m with a mud bottom. It is close to shore, abreast a road leading to **Tagaule village** (1°03'N., 97°53'E.). There is another anchorage off Bodsyihona village (1°05'N., 97°49'E.) to the N, in a depth of 18.3m. Local knowledge is necessary.

Onolimbu consists of two islands located about 1 mile N and 2.5 miles NE, respectively, of Ujung Onolimbu.

There are several drying shoals about 3.5 miles NNW of Ujung Onolimbu.

**Tanjung Lambaru** (1°09'N., 97°48'E.), situated about 8 miles NW of Ujung Onolimbu, is swampy and thickly overgrown; dead trees stand on it and in the water close off it.

**6.23 Gunungsitoli** (1°17'N., 97°37'E.), about 14 miles NW of Tanjung Lambaru, forms a deep bight; at its head the hills approach the shore, leaving a strip of lowland between them.

The mouth of the river, leading to the port, will just admit small trading craft at HW; it is always marked by surf.

Gunungsitoli, the chief town of the island, is the seat of government. It lies mainly on the left bank of the river. The harbor is sheltered from W and SW winds, but to all winds from N and SE it is completely exposed so that considerable swells may result. It is advisable to anchor in 40m, mud bottom, at about 0.2 mile offshore.

North of Gunungsitoli, the coast is covered with coconut trees for about 6 miles. Close N of Gunungsitoli is **Tanjung Mbaa** (1°18'N., 97°36'E.), a rocky point from which a light is shown.

From Tanjung Mbaa, a narrow strip of coast land extends about 3 miles NW, then a fringing reef leads up to **Tanjung Laaja** (1°28'N., 97°29'E.). Tanjung Laaja is the N end of the slope of a hill backing the coast. It is covered with coconut trees, steep-to, and free from dangers but is difficult to identify.

**Tanjung Dowi** (1°31'N., 97°25'E.) is fronted by a reef which dries to a distance of about 0.1 mile, with depths of 5.5m at 0.4 mile from the point.

**Teluk Siaba** (1°31'N., 97°24'E.), the N anchorage of Pulau Nias, is entered W of Tanjung Dowi. There are two inlets on its W side. Anchorage may be obtained in Teluk Siaba in depths of 29m to 40m, giving some shelter from N or W winds.

**6.24 Pulau Bintanah** (1°29'N., 98°10'E.) is low and fringed by a reef, and should be given a wide berth. From Pulau Bintanah, a chain of reefs and shoals, some of which dry, extends 32 miles to the S.

The positions of these dangers may best be seen on the chart.

**Makasser** (1°30'N., 98°24'E.), a steep-to reef which dries, lies about 14 miles E of Pulau Bintanah.

**Pandjang** (1°03'N., 98°18'E.) is a small islet lying the S end of the chain of reefs. A partially submerged wreck lies on the reef close S of the islet. Shoal water, with a least depth of 4m lies 3 miles N of Pandjang; a depth of 11m lies 5 miles S.

As other rocks may exist in the vicinity, vessels passing E of Pulau Bintanah should keep close over to Pulau Musala, which is steep-to, and to the mainland S.

If passing W of Pulau Bintanah, they should keep towards the coast of Pulau Nias to avoid the central reefs, which extend S to about 0°47'N.

**Pulau Musala** (1°38'N., 98°32'E.) lies in the W approach to Teluk Tapanuli. At its NW end is a conical mountain, about 451m high, with a prominent tree on its summit.

There is a remarkable waterfall at the NW end of the island issuing from a hill with an elevation of 55m; it is a good mark when approaching from NW.

**Teluk Labuanhunik** (Teluk Tanah Ronto) (1°40'N., 98°31'E.), the largest indentation on the N side of Pulau Musala, has depths of 27.4m to 34.7m.

**Pulo Pulotalam** (Teluk Mansalar) (1°37'N., 98°35'E.), at the SE end of Pulau Musala, is sheltered W by an island, and affords safe anchorage in depths of from 18.3 to 40.2m over soft mud.

From **Baroes Road** (2°00'N., 98°23'E.), the coast continues SE for about 27 miles, to the N entrance point of Teluk Tapanuli.

**6.25 Teluk Tapanuli** (1°38'N., 98°45'E.), entered between Ujung Karang and Ujung Batumamak (Batu Mamak), about 9 miles S, is the most sheltered and secure anchorage on this portion of the W coast of Sumatera. The bay is almost completely surrounded by high mountains.

**Sibolga** (Tapanuli) (1°44'N., 98°46'E.) (World Port Index No. 50510) harbor, an extensive inlet on the N side of Teluk Tapanuli, is subdivided into many coves by islands, where a large number of vessels may lie sheltered from all winds in 11 to 16.5m. The basin NW of the head of the harbor has depths of 3.7m and could contain a considerable number of small craft. Ocean vessels should remain in the roads. A light is shown from Sibolga. Pilotage is not compulsory.

**Anchorage.**—The usual anchorage is E of **Pulau Poncan-Kecil** (Ponchang Kechil) (1°44'N., 98°45'E.) in depths of from 11 to 12.8m, mud.

Submarine cables run from Tapanuli, and a point 1.5 miles N. Vessels must not anchor within 50m of them.

An area, about one mile in diameter, where ammunition has been dumped, lies with its center about 2 miles SW of Ujung Karang.

The N channel to Teluk Tapanuli, between Pulau Musala and the Sumatera coast, is 7 miles wide, with depths of from 21.9 to 36.6m on either side of Banda Reef, lying nearly in mid-channel.

The S channel, between Pulau Musala group and **Pulau Tungkus Nasi** (1°35'N., 98°41'E.) is 5 miles in breadth and free from danger, with regular depths of about 43.8m.

The coast from **Ujung Batumamak** (Batu Mamak) (1°34'N., 98°42'E.), the SW extremity of Teluk Tapanuli, trends in a S direction for about 49 miles to Tanjung Tabujung (Tabuyung). There is a reef, with a depth of 3.7m, lying about 0.75 mile offshore, 13 miles S of Ujung Batumamak. An above-water rock lies about 1 mile offshore, 14 miles N of Tanjung Tabujung.

Tabujung Road, located N of Tanjung Tabujung, is partly sheltered by Pulau Tengah (Pulau Tonga) and **Pulau Si Dakah** (Pulau Labu) (0°51'N., 98°57'E.), about 4 and 1.5 miles, respectively, NW of Tanjung Tabujung. A light is shown from Pulau Si Dakah.

**6.26 Tabujung** (Tabuyung) (0°51'N., 98°58'E.) (World Port Index No. 50500) is located less than 1 mile E of Tanjung Tabujung, close within a river entrance. The bar of the river has depths of from 5.5 to 7.3m.

Anchorage may be obtained either E of Pulau Tengah, in depths of from 18 to 20m, or E or S of Pulau Si Dakah, in depths of 7.3 to 9m, mud.

Both anchorages are fairly sheltered from NW winds, with good holding ground.

A vessel passing W of Pulau Tengah should give it a berth of 3 miles.

The coast between Tanjung Tabujung and **Ujung Sikarakara** (0°38'N., 99°02'E.), about 14 miles S, is fronted by many dangers, some of which lie just within the 10m curve.

**Sirene Reefs** (0°43'N., 98°56'E.), one of the outermost dangers in this locality, consists of four heads, of which the W most and the S most, with 0.9m of water, sometimes break; there are depths of 1.4 and 6.9m on the other two patches.

**Natal Road** (0°33'N., 99°05'E.) lies off the coast between Ujung Sikarakara and Ujung Rakat, about 6 miles S; it is open W and is encumbered with many dangerous shoals, rendering it one of the worst anchorages on the coast. The shore is fringed by a bank, with depths of less than 5.5m, extending about 2 miles offshore.

Mandera, a hill 109m high, lies about 5.2 miles SE of Ujung Sikarakara, and about 1 mile NNE of **Natal** (0°33'N., 99°07'E.); it is wooded, appears wedge-shaped from NW, and, having low land on either side, is a good mark.

Anchorage may be obtained in depths of from about 7.3 to 11m, soft clay, about 3 miles offshore, with Mandera bearing 090°. Small craft may anchor closer inshore, in a depth of 4.9m.

**Teluk Batahan** (0°24'N., 99°07'E.) about 8 miles wide, is an open bight and lies S of Natal Road between **Ujung Sumur** (0°30'N., 99°05'E.), about 2 miles S of Ujung Rakat and **Ujung Palimbungan** (0°20'N., 99°06'E.), about 10 miles S.

**Pulau Tamang** (Pulau Temang) (0°22'N., 99°05'E.) is a hilly island easily identified and is located at the SE extremity of Teluk Batahan, about 1 mile from the coast. It is fringed by a reef except at its W end, where there is a depth of 11m about 0.1 mile offshore. A light is shown on the W end of Pulau Tamang.

A shoal, with a depth of 11.9m, lies 0.75 mile W of the W extremity of Pulau Tamang.

**Anchorage.**—There is good anchorage in depths of 16.5 to 18.3m, over soft clay, between the island and the mainland, with the N point of the island bearing about 315° and Ujung Palimbungan bearing S.

From Pulau Tamang the coast is indented by a bight and trends S for 6 miles to **Udjang Iban** (0°15'N., 99°08'E.), which is rocky.

**6.27 Great Channel** (0°15'N., 98°00'E.), between Pulau Nias and Pulau Pulau Batu, is about 37 miles across and safe with a good lookout, but caution is necessary when near any of the islands on either side during the night, as the dangers are not all known.

A bank, with depths of 23.8 to 36.6m, extends 23 miles S of Pulau Nias.

**Pulau Pulau Batu** (Kepulauan Batu) (0°18'S., 98°28'E.), forming the S side of Great Channel, consists of three large islands, Pulau Tanahmasa, Pulau Tanahbala and Pulau Pini, with numerous islands fringed by extensive coral reef.

**Pulau Simuk** (0°05'S., 97°52'E.), the W most island of the Pulau Pulau Batu group, and located about 25 miles W of the W extremity of Pulau Tanahmasa, is low, but covered with high trees.

Pulau Sigata, about 17 miles E of Pulau Simuk, is 117m high on its E side with a slight elevation reported on the W side. A light is shown on the E side of Pulau Sigata.

**Pulau Tanahmasa** (0°12'S., 98°27'E.), 10 miles E of Pulau Sigata, is the central and largest island of Pulau Pulau Batu.

The N coast of Pulau Tanahmasa is low and fringed by a reef, which extends about 0.3 mile W from **Tanjung Seropi** (0°01'S., 98°17'E.), the W extremity of the island.

This island is moderately elevated and hilly, covered with trees, but its summits are not conspicuous, with the exception

of one 270m high, which is visible from the SE and E for a considerable distance.

Many small islands line its coasts, both on the E and W sides, with moderate depths among them, forming safe bays or harbors.

**6.28 Pulau Tanahbala** (0°25'S., 98°25'E.) is the southernmost large island of the Pulau Pulau Batu group. On its N part is a hill 270m high, which appears pyramidal in shape from the E and NW.

**Tanjung Hatik** (0°30'S., 98°17'E.), its W extremity, is visible from a considerable distance from the N, appearing as a separate island.

The E coast of Pulau Tanahbala trends N for a distance of 22 miles to its N extremity. The N part, for a distance of 10 miles, forms the W side of Selat Tanahbala, which lies between Pulau Tanahmasa and leads to **Telo Roadstead** (0°03'S., 98°17'E.) in smooth water. Local knowledge is necessary.

**Pulau Pini** (0°08'N., 98°40'E.), located between Pulau Tanahmasa and the coast of Sumatera, has no distinguishing features. It is densely overgrown, sparsely populated, and has no navigable streams.

The island is surrounded by a coral reef, excepting the SW extremity where it may be approached. Landing, however, is difficult because of the mangroves.

**Laut** (0°17'N., 98°42'E.), with a depth of 3.4m and difficult to distinguish, lies about 6 miles N of the N coast of Pulau Pini.

There are numerous detached shoals and patches lying up to 6 miles off the N, E, and SE coasts of Pulau Pini, for which the chart should be consulted. Several islets and a large number of reefs lie off the S side of Pulau Pini. Within the 20m curve, which is 2 miles off the W coast, the depths are very irregular and numerous patches from 4.6 to 9.1m surrounded by deeper water are found.

**6.29** The S coast of Pulau Tanahbala forms the N shore of Selat Siberut, which lies between **Pulau Bodjo** (Pulau Bojo) (0°38'S., 98°31'E.) and Pulau Siberut, about 22 miles SE. Selat Siberut is the passage usually taken by vessels bound to **Teluk Bayur** (1°00'S., 100°22'E.) from N.

Low-powered vessels from the Indian Ocean bound to **Selat Sunda** (6°00'S., 105°45'E.) between May and September, and all vessels bound N from Selat Sunda between November and March, use this passage.

There is generally a long line of surf on the shores of the strait, particularly on its N and W portions. In the E portion, and under the Pulau Siberut shore, there is shelter from the sea which causes heavy surf on the N shore, where all the dangers lie within the 5.5m line.

**Winds—Weather.**—From November to May, when the NW monsoon prevails S of the Equator, the weather is fine in Selat Siberut, with light S and SW winds. The wind is rarely stronger than force 2; in March and April strong W squalls lasting about 10 minutes may be experienced. In the other months of the monsoon rain, squalls with little wind may be expected.

If the wind shifts to S during the SE monsoon period, which usually occurs between June and September, hard NW and W winds prevail in Selat Siberut, accompanied by heavy squalls.

**Tides—Currents.**—The tidal currents are reported to be irregular. Sometimes a W set is experienced for several successive days; at other times, an E set is experienced, with the latter being generally the weaker.

After a few days of light winds the currents turn at about H and LW. The strongest currents are found close to the shores, where, N of **Tanjung Sigep** (0°54'S., 98°54'E.), the N extremity of Pulau Siberut, and between **Pulau Bodjo** (0°38'S., 98°31'E.) and Pulau Tanahbala, they sometimes attain a rate of from 2 to 3 knots. In the latter vicinity the flood sets ENE and the ebb WSW.

**6.30 Pulau Bodjo** (0°38'S., 98°31'E.), lying about 2 miles S of the SE extremity of Pulau Tanahbala, is densely wooded and about 150m high. It is fringed by a steep-to reef which nearly dries, extending about 0.3 mile offshore in places. A light is shown from the S side of the island.

**Van Bylandt Reefs** (Karang Posumah) (0°37'S., 98°40'E.) consists of two patches, located about 7 miles ENE and E, respectively, of Pulau Bodjo; they have depths of from 4.9 to 5.5m. The SW side of the bank is very steep-to, but the NE side is more shelving. The shoalest parts may occasionally be distinguished by the swell, but seldom by breakers.

**Makasser Reef** (0°48'S., 98°37'E.), with a depth of 0.6m, lies about 12 miles SSE of the S extremity of Pulau Bodjo. It is easily recognized in the daytime by the high breakers on its shallow portion. The reef extends 1 mile beyond the breakers.

**Directions.**—Vessels approaching Selat Siberut from the W should steer to pass about 2 miles S of the W point of Pulau Tanahbala, and will sight Pulau Bodjo with its lighthouse.

The best course is to pass between Pulau Bodjo and Makasser Reef, which is clear of all danger; the reef is nearly always to be seen by the breakers.

The island should be passed at a distance of 2 miles, steering about 090°, until Tanjung Sigep bears 155°, when a course may be shaped for the desired port.